# GEOGRAPHIC NEWS BULLETINS

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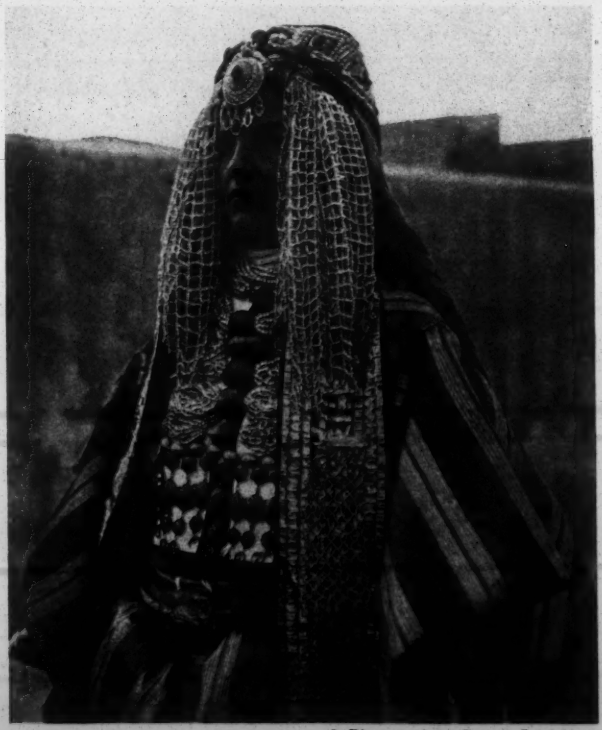

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A FEZ ARISTOCRAT IN A COSTUME VALUED AT TWO MILLION FRANCS
(See Bulletin No. 2)

### HOW TEACHERS MAY OBTAIN THE BULLETINS

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## The Empire Which a Gibraltar Tunnel Would Tap

RAILWAY tunnel projects once more interest Europe; France and England reconsider the proposal for a tunnel under the English Channel; Spaniards are talking about a subway under the Strait of Gibraltar.

Engineers dream of loading a freight car in London and dispatching it on a through trip under the English Channel, across France and Spain, under the Strait of Gibraltar and down the west coast of Africa to Dakar. There goods could be loaded on a steamer which would reach South America within four days.

But the first goal of a Gibraltar tunnel is Morocco, Spanish and French. It is a region of rich prospects. Tropical fruits grow in its valleys, streams from its mountains await harnessing for electric power and irrigation, minerals are in its hillsides. Pacification of the fighting tribes has prepared the way for the engineer to win a new empire for civilization in northwest Africa.

### Three Distinct Mountain Ranges in Morocco

Until recently the French occupation of Morocco has been effective chiefly in the lowlands and plateaus. Morocco has mountains that are truly Alpine in height and character, the High Atlas range that extends across the northwestern corner of Africa from a point on the Atlantic coast 500 miles south of the Strait of Gibraltar to the border of Algeria. In the north, along the Mediterranean coast, is the Rif, a range of high, rugged hills. Between them, almost bridging the High Atlas to the Rif hills, is the Middle Atlas range.

The region between these mountain systems and the Atlantic coast is an area of plains and plateaus, crossed by streams that flow (some of them flow only part of the year) from the mountains to the sea. It was in this area, open to the Atlantic, that the French first obtained a secure foothold. They occupied Casablanca, midway of the Atlantic coast, in 1907, after the massacre of a number of Europeans. In 1911 the Sultan, hemmed in at Fez by rebellious natives, called on the French for assistance. After his throne had been saved the Sultan signed a treaty creating the French Protectorate of Morocco, which has been in existence since.

### French Bring Mountain Tribes Under Control

In the period preceding the World War Marshal Lyautey extended French control over most of the region between the mountains and the sea; then he established a highway and railway through the valley between the Rif and the Middle Atlas, thus connecting the new French Protectorate with the French colony of Algeria. In spite of continuous German intrigue, these regions were held during the World War. But always the highlands were in the hands of unconquered bands of natives.

After the World War, French rule was extended in Morocco in all directions, sometimes by the use of guns, sometimes without them. Fighting was necessary in the north, and in cooperation with the Spanish the Rif was pacified in 1926. There was even peaceful advance for a distance into the High Atlas in the south; but certain tribes in the midst of the Middle Atlas remained sworn enemies. The French Army has now taken this central mountainous region over, although no fighting was necessary.



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**RAILROADS MAY TAKE HIS JOB AWAY**

Railroad lines have already reached the historic cities of Bokhara and Samarkand and are pushing on to the eastward through Turkestan. Steel rails, extending along routes that may have been traversed by Marco Polo, take up the burdens of the camel caravan on which this region has depended for transport since time immemorial (See Bulletin No. 2).

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## Russia Wins Its "Wild East" with American Methods

THE SERIOUS earthquake reported in Russian Turkestan probably damaged the railroad which the Soviet Government is pushing into its "Wild East." Alma Ata (Verni before the World War) sent word of severe damage. For the time being Alma Ata is just beyond the end of the railroad, and it was to this outpost that Leon Trotsky was exiled. Trotsky left Alma Ata, it is rumored, for a new place of exile before the earthquake occurred.

The Soviet Government hopes that by 1930 the line of steel rails extending east will cross a thousand miles of semidesert and link Turkestan to Siberia.

Americans should be able to understand Turkestan better than any other people; the "winning of the Land of the Seven Rivers" is much like the winning of our own West.

### By Covered Wagon to the Land of Seven Rivers

Kirghiz instead of Comanches, snow-capped Tien Shan instead of the Rockies, salt Lake Balkhash instead of Great Salt Lake, tigers and panthers instead of mountain lions, deer instead of buffalo, yurts instead of tepees, Cossacks instead of United States Army scouts, *kodoki* instead of land agents —the same pioneer story in different words. Substitute St. Louis for Frunze, Alma Ata for Omaha, Kopal for Cheyenne, Sergiopol for Ogden, Semipalatinsk for Reno, and Novo Sibirsk (formerly Novo Nikolaevsk) for San Francisco, and you have an idea what this new railroad means to Central Asia. One town has already moved bag and baggage, homes, post office and tavern, 50 miles to be on the railroad.

When the old Russian Government opened the fertile valleys of Eastern Russian Turkestan to colonization a few years before the World War, land-hungry peasants poured in from European Russia. Some high officer would command, "plant twenty villages in this valley this year," and no sooner had the engineers laid out the streets than the stream of covered wagons from the west would wind into the new domain. Turf houses rose and trees were planted. Just as Dakota farmhouses can be dated by the growth of their windbreaks, so the Russian colonists' dwellings are as old as their waving poplars are tall.

### Colonists Like American Movies and Havana Cigars

Central Asia is no dreary exile prison, although Dostoievsky, the famous novelist, was condemned to Semipalatinsk and Trotsky to Alma Ata. For thousands of Russians it is a land of hope. They expect the new railroad, which will pass along the foothills of the Tien Shan and then turn north around the east end of Lake Balkhash, to do for them what transcontinental railroads did for the United States. A railroad will enable them to send out wheat, barley, rye, rice and apples from their irrigated farms and wool and mutton from their illimitable pastures.

Like the Indian, the Kirghiz fades before the colonists because he will not settle down in one place with his wives. Many of the nomads, who still insist on passing from the lowlands to the uplands as the seasons change, have been forced over the border into Chinese Turkestan. They live in demountable felt huts called yurts and reckon their wealth in horses, oxen, goats and sheep. Mo-



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The Central Atlas Mountains send considerable quantities of water down to the north and west, into and across some of the best agricultural lands of Morocco. These mountains, too, rise close to Fez and Mekinez, one of the most thickly populated sections of the Protectorate. By controlling the sources and upper reaches of the Middle Atlas streams France can greatly promote prosperity in the heart of Morocco. It is planned to make the precious waters create power before they pass lower down, there to be conserved by a system of reservoirs and canals. To the already extensive system of highways that she has created, France will soon add to the Moroccan landscape dams, power houses, and electric power lines.

### Caids or "Dukes" Rule over Large Areas

The dominant racial element in Morocco is the Berber, and it is to the presence of this strain, rather than to the fewer Arabs and even fewer Jews and Negroes, that France's success in pacifying and modernizing Morocco is due. The Berbers are of white stock and, when dressed in European clothes, pass easily for Europeans. In contrast to the Arab and the Negro, they have the European's outlook on life, and even his sense of humor. They have taken kindly to French methods and to service in the French Army. Frenchmen and Berbers are mixed in the territorial regiments, and the soldiers of the two groups have become fast friends.

In the High Atlas Mountains of southern and southeastern Morocco feudalism exists, much as it existed in Europe a thousand years ago. Large areas are the fiefs of great "dukes" called caids, who are almost independent but nominally recognize the Sultan as their overlord. Under the caids are "barons" called caliphas, and under them sheiks who rule villages and groups of common people.

**Bulletin No. 1, March 4, 1929.**

© *Photograph by Wide World Photograph*

**RIFFIAN WARRIORS WHO DEFIED THE ARMIES OF FRANCE AND SPAIN**

**These tribesmen, numbering about 30,000, live in the hill territory of the Spanish Zone adjacent to the Strait of Gibraltar. Under the leadership of their chieftain Abd-el-Krim they fought a desperate battle against Spain and were partially successful until France joined in the conflict. Abd-el-Krim was captured and has been exiled to the Island of Réunion in the Indian Ocean.**

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## France: Third Among the World's Landlords

FOR THE Colonial Exposition to be held in Paris in 1931, France can call on the vast empire she administers overseas. Loss of territory in North America has not prevented France from obtaining and keeping a tremendous domain.

A recent census shows that the French flag flies over some 100,000,000 people. This population is about 20,000,000 less than that of the United States. However, France is the third largest national landholder in the world, with possessions nearly double the area of this country.

French colonies lie in every continent except the North America mainland and Australia. However, French-owned islands lie close to both these continents.

### Nearly One-half of Africa Owned by France

The largest slice of the Republic's domain covers almost half the area of Africa, including nearly the whole western shoulder from Italian Libya and the Anglo-Egyptian Sudan to the Atlantic and from the Mediterranean to the Belgian Congo. This area consists of the fertile agricultural lands and mountains of the north; the sandy, sparsely settled wastes of the Sahara; the French Sudan and Chad with their fertile plains, thick forests and swamps; and the jungle land of French Equatorial Africa. The 36,000,000 inhabitants of these regions range from the white Berbers to the blackest Senegal and Congo negroes.

French Somaliland, on Africa's opposite shoulder, is about as large as Connecticut. Until recent years it was a hot, desert country, but irrigation has made it habitable for more than 200,000 Arabs, Abyssinians and Frenchmen who maintain good trade and handle much of Abyssinia's commerce through the port of Jibuti. The Comoro Islands, Madagascar and Réunion, off the east coast of Africa, are also included in the French group of possessions. Their subtropical to tropical climate, fertile valleys and thickly wooded hills make them island garden spots where 4,000,000 people live under the tricolor. Counted among the Réunion inhabitants is the famous Abd-el-Krim, the Riffian rebel leader captured in Morocco. He has been exiled for life. (See also Bulletin No. 1)

Syria, the nearest Asiatic possession, has been French by mandate of the Supreme Council of Allied Powers since 1923. Three million Syrians, Jews and foreigners inhabit this area. Frequent uprisings have tested French colonization efforts in this region.

### French Indo-China Equal in Area to Texas

French India consists of five tiny colonies: Mahe, on the west coast a short distance north of Calicut; Karikal, Pondicherry and Yanaon on the east coast. Chandernagore, lying north of Calcutta, is so surrounded on the map by British pink that a geography student could easily miss finding it.

Summing up French India, the five French "spots" if placed together would cover a space no larger than one and one-half times the area of Philadelphia, Pennsylvania. The total population of the five colonies is not quite equal to the population of Rochester, New York.

French Indo-China, which is almost mile for mile equal in area to Texas, is perhaps the most progressive of all French possessions. While counting the nearly 20,000,000 natives and foreigners here, census enumerators travel through



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hammedan by faith, the Kirghiz wear turbans, yet the women never attach veils to their bulky, white headdresses.

Central Asia has developed a great interest in the New World, probably because it has more in common with the Americas than with Europe. Erect Cossack, fat-faced peasant, swarthy Kirghiz, and the yellow Chinese Mohammedan gather in stuffy halls to see movies of the American Wild West. And the articles which give officers guarding against Chinese smugglers the most trouble are Havana cigars.

**Bulletin No. 2, March 4, 1929.**

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**IN SIBERIA MUSTACHES COLLECT ICICLES IN WINTER**

**Siberia is the coldest inhabited area in the world, and Russian Turkestan often shares its low temperatures. These drivers started off on a sleigh-ride with the mercury at 44° below zero.**

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## New Grant for Study of Sunbeams

DR. GILBERT GROSVENOR, President of the National Geographic Society, has announced an additional grant of $10,000 voted by The Society's Research Committee to continue the support of the Solar Radiation Expedition stationed at Mount Brukkaros, South West Africa.

This grant assures another year's work of one of the most unusual scientific expeditions ever sent into the field—an expedition whose members live in a cave-sheltered shack, on a Hottentot Reservation, for the purpose which has been popularly described as "taking the daily temperature of a sunbeam."

### Site Chosen After Study of Certain "Places in the Sun"

The original grant of $55,000 for the expedition was made in 1925, and the first step was to select the best site in the world for setting up an observatory for making a daily measurement of solar radiation. The leader of the expedition, Dr. Charles G. Abbot, Secretary of Smithsonian Institution, went on a "sunshine search," visiting the Atlas Mountains of Algeria, the mountains of Egypt and Baluchistan, and finally settled on Mount Brukkaros, in South West Africa, a 5,200-foot elevation, 60 miles from Keetmanshoop.

To this barren, isolated, almost rainless location were shipped instruments which it had taken twenty years or more to devise; these were mounted in part in front of a tunnel some 35 feet deep, excavated in solid rock, so that the delicate apparatus would have nearly constant temperature conditions.

William H. Hoover and Fred A. Greely, two scientists, took over the work of making the daily observations at this lonely post, where the nearest neighbors are Hottentot tribes living very much in the fashion described by Vasco da Gama when he first met them, and where the only fun is an occasional springbuck or ostrich hunt.

The South West African Government helped in the building of the unique laboratory and later erected a telephone line 30 miles long, connecting with the railroad telephone system and cable station, by which the expedition can send its observations to Washington.

### Expect Studies Will Make Prediction of Sun's Behavior Possible

In a letter to Dr. Grosvenor setting forth the reasons for applying for an additional grant, Dr. Abbot said the prospective value of the observations has increased. He explained:

"About two years ago I discovered an important regular periodicity of 2.15 years in the variation of the sun and subordinate periodicities of 15 months and 11 months, beside the well-known periodicity which we discovered some years ago attending the 11-year march of the sunspot cycle.

"The important 2.15 period has also been recognized in the meteorology of Europe for the last century; in the yields of crops such as wheat and corn; and lately has been noted in the advance and retreat of glaciers over the past 10,000 years.

"It now seems probable that, with the aid of these periodicities, the principal variation of the sun and the behavior of all that hangs upon it can be predicted for several seasons in advance."

**Bulletin No. 4, March 4, 1929.**

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one of the world's great rice producing areas and thousands of acres of mulberry trees—food for silk worms, the basis of a large Indo-China silk industry.

Off the northeast coast of Australia lie the Loyalty Islands and many smaller groups, and the New Hebrides which are governed jointly by the French and British. Many of the 47,500 inhabitants of these islands are pagan natives. Cannibalism is not openly practiced, but it is said the tribesmen eat the foes they kill in tribal warfare.

Tahiti is more interesting and alluring. It is the center of the Society Islands, and not far off are the Marquesas, the Tubuai group, Tuamotu Archipelago, Gambier and Rapa Islands, where singing, dancing, feasting and all that suggests happiness and romance permeate the atmosphere. About 32,000 inhabitants, most of them graceful and hospitable, live there amid scenery whose description by Captain Cook enraptured all Europe.

### France Uses South American Colony as Prison for Criminals

It is a long journey from Tahiti to Guadeloupe and Martinique in the West Indies with their half million white, mulatto, negro and oriental inhabitants. Martinique's people have not forgotten the eruption of Mont Pelée in 1902 which wiped out the city of St. Pierre.

French Guiana, one of the "European triplets" of South America's north coast, has less than fifty thousand Indians and blacks who live in the fever-infested coastal swamps and torrid forests of the hinterland. Although diamonds, silver, mercury, tin and copper have been found in the colony, its chief use is as a penal station for criminals.

French North America consists of two rocky islands, St. Pierre and Miquelon, off the southern coast of Newfoundland, which are peopled by about 4,000 sturdy fisherfolk of Breton and Norman stock.

**Bulletin No. 3, March 4, 1929.**

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**AN OUTPOST OF FRENCH-COLONIAL POWER IN THE SUDAN**

**The military post of Burem overlooks the broad stretches of the Niger which at this point, 1,500 miles from its mouth, is nearly a mile wide. In recent years many stories of adventure have been written around the Foreign Legion, that body of troops which protects France's vast interests in Africa.**

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## Red Square: Graveyard for Soviet Leaders

ANOTHER AMERICAN, a newspaper correspondent and author, recently was laid to rest in Red Square, Moscow, near the grave of his fellow-countryman John Reed and not far from the mausoleum of Lenin.

Junius B. Wood describes Red Square and tells its significance to Russia in a communication to the National Geographic Society:

"A late winter sun was casting its long shadows across Moscow's Red Square, early one evening, as I started for the opening meeting of the Tz. I. K. (Central Executive Committee) in the Great Palace of the Kremlin. Red was the favorite color of Tsar and muzhik, and the Red Square was the Red Square centuries before Bolshevism or Communism adopted the color as its battle flag.

### Red Square Under the Walls of the Kremlin

"The delegates to the Tz. I. K., alone or in twos and threes, made their way through the crowd. Puddles of water with the first spider webs of the nightly frost alternated with dirty patches of winter ice on the Red Square. Along the terrace where the grave of John Reed, American, has a place in the slowly growing line of departed Soviet leaders, outside the mile-and-a-quarter, 65-foot wall which surrounds the Kremlin, snow showed white beneath the winter grime.

"Lenin's temporary wooden mausoleum, a squat cube on the north side of the square, dwarfed by the towering wall behind, is a world shrine of Communism. Sentries stand on guard and a double line of visitors waits to enter.

"Through the centuries the bulbous, gaudy domes of St. Basil's Cathedral have looked down on the Red Square, watching Russian history, just as they still rise serene as the square echoes to the tramp of Red army and Soviet workers and the blare of electric amplifiers as party orators hold forth on the platform of Lenin's tomb.

### Where Tsars Were Proclaimed and Pretenders Killed

"From the stone rostrum in front of the cathedral the ukases of the Tsars were read. Before its doors Peter the Great executed several hundred of the Streltzi, the old Muscovite militia. Here Tsars were proclaimed and pretenders were killed. Across that square each proud emperor led the patriarch of the church on a donkey into the Kremlin, through the Spasskiya (Redeemer) Gate, which no man entered from 1647 to 1917 without baring his head.

"In daylight hours a constant human stream jostles through the towered Iberian Gate in the wall between the Red Square and the Place of the Revolution outside the Kitai Gorod (Fortified City). Men in sheepskin coats, the greasy leather outside and the fur inside; clerks in glossy leather jackets; officials with beaver collars, brief-cases under their arms; women in felt boots; girls in slippers, with bundles, babies, and carts, were tramping through the slush, for this was a winter evening.

"Between the gates in the center of the road is a shrine and inside the wall a church. The faithful pause and make the sign of the cross as they pass. Others enter. Patriarchal, bearded beggars, hands outstretched, stand at the doors.



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**THE RED SQUARE IN MOSCOW HAS SEEN MANY CROWDS**

Even in the years before the World War the Red Square was a popular gathering place for the masses of the Russian metropolis. Now it is the sacred place, the holy of holies of the Soviet regime. The Trading Rows Building looks across the Square to the stern walls of the Kremlin Palace (See Bulletin No. 5).

"The crowds elbow through the white-painted brick gates, in and out of the Red Square, between a gantlet of venders. Baskets and clumsy little wagons are on the curb; also flabby, brown, frozen apples for a cent and fat ones, carefully sheltered under blankets, for 40 cents; stands of cigarettes, each with one and a quarter inches of tobacco and three inches of paper mouthpiece; oranges for 70 cents; cheeses, cut and weighed while you wait; candies collecting dust; dried sunflower seeds, two cents the glassful.

**Cobblers Sell Automobile Tire Rubber Heels At Sidewalk Department Store**

"Along the faces of the buildings are the venders of notions; a display of of steel engravings and colored lithographs on the sidewalk; women coyly dangling handfuls of homemade brassieres, as numerous in Moscow as milking machines at a country fair; tables of books, Soviet in paper covers, and other languages in faded leather.

"There are also cobblers with secondhand shoes and rubber heels cut from automobile tires; talkative youths shaking sticks strung with women's garters of gaudy colors and flimsy buckles; displays of socks, stockings, and handkerchiefs; leather and woolen gloves, tin and wooden toys, rubber penny squeakers, shoestrings—a sidewalk department store."

**Bulletin No. 5, March 4, 1929.**

© *Photograph by "Russ-Photo"*

**THE WORLD SHRINE OF COMMUNISM**

**The squat cube of the temporary wooden mausoleum of Lenin is on the north side of Red Square. This leader of commanding personality died in 1924. His complete works—books, articles, speeches, and some letters—were published in Moscow shortly after his death.**